

A4
of a picture quality caused by a residual image. The signal line 117a, serving as a source electrode of the TFT also, requires no extension pattern of the signal line as in the related art, and maintains a constant capacitance C_{cross} formed in an overlap region of the scanning line 111 and the signal line 117a. And, the signal line 117a maintains a constant capacitance C_{gs} between the scanning line 111 and the signal line 117a even if a misalignment occurs between the scanning line 111 and the signal line 117a. Since a pattern extended from the drain electrode 117b overlaps the scanning line 111 completely, even if there is a misalignment between the scanning line 111 and the signal line 117a, the capacitance between the scanning line 111 and the drain line 117b is always maintained constant. Accordingly, the ΔV_p and ΔV_{pxl} involved in the effective voltage for driving the LCD are maintained constant owing to the C_{gs} , C_{gd} and C_{cross} , which are always constant regardless of the misalignment. In the drawing, ' δ ' is greater than a movement caused by the misalignment of the scanning line 111 and the signal line 117a, ' Δ ' is greater than a movement caused by the misalignment of the scanning line 111 and the channel layer 115, and ' Δ ' is greater than a movement caused by the misalignment of the signal line 117a and the channel layer 115.

In the Claims

✓
Please cancel claims 1 and 8 without prejudice or disclaimer.

Please amend the claims as follows (A marked up version of the amended claims is attached):

2. (Amended) A TFT LCD (thin film transistor liquid crystal display) comprising:

A5
a first substrate and a second substrate;

figs. 2A, 2B
a scanning line on the first substrate;

a signal line formed to cross the scanning line, wherein the signal line does not include an extension pattern;

a channel layer formed along the signal line and extended to a portion of the scanning line;

source and drain electrodes formed separated on the channel layer over the scanning line;

a pixel electrode connected to the drain electrode; and

a liquid crystal layer formed between the first substrate and the second substrate;

wherein the drain electrode is parallel to the signal line.

AS

3. A TFT LCD as claimed in claim 2, wherein the channel layer has a width smaller than a width of the signal line and the scanning line.

4. A TFT LCD as claimed in claim 2, further comprising a gate insulating layer between the scanning line and the channel layer.

5. A TFT LCD as claimed in claim 2, further comprising an ohmic contact layer between the source and drain electrodes and the channel layer.

6. A TFT LCD as claimed in claim 2, wherein the source electrode and the signal line are formed as a unit.

7. A TFT LCD as claimed in claim 2, wherein the drain electrode is overlapped with the scanning line.

9. (Amended) A TFT LCD comprising:
a first substrate and a second substrate;

Fig. 2A, 2B
A6

a plurality of scanning lines on the first substrate;

a gate insulating layer on an entire surface inclusive of the scanning lines;

a channel layer on the gate insulating layer to cross the scanning lines having a portion extended to a top of at least one of the plurality of scanning lines;

source and drain electrodes formed separated on the channel layer over the scanning lines;

a signal line formed as a unit with the source electrode along the channel layer which is formed to cross the scanning lines, wherein the signal line does not include an extension pattern;

a protection film formed on an entire surface inclusive of the signal line;

a pixel electrode connected to the drain electrode on the protection film; and,

a liquid crystal layer formed between the first substrate and the second substrate;

wherein the drain electrode is parallel to the signal line.

AL6
cont.

10. A TFT LCD as claimed in claim 9, wherein the drain electrode crosses the scanning line.

11. A TFT LCD as claimed in claim 9, wherein the channel layer has a width smaller than a width of the signal line and the scanning line.

12. A TFT LCD as claimed in claim 9, further comprising an ohmic contact layer between the source and drain electrodes and the channel layer.

13. A TFT LCD as claimed in claim 9, wherein the scanning line has a portion enlarged in the vicinity of the signal line.

fig. 3